

IN THE CLAIMS:

1. (Currently amended) A method for providing metadata, comprising:
~~creating an object descriptor class for an object;~~
providing an object descriptor interface ~~using the object descriptor class;~~
creating an object descriptor class for an object using the object descriptor
interface;
using methods defined by the object descriptor interface to identify a property of
the object;
~~creating a property descriptor class for the property of the object;~~
providing a property descriptor interface ~~using the property descriptor class;~~
creating a property descriptor class using the property descriptor interface; and
using methods defined by the property descriptor interface to obtain metadata
associated with the identified property.
2. (Original) The method of claim 1, wherein the object descriptor interface extends
a property set descriptor interface.
3. (Original) The method of claim 2, wherein the property set descriptor interface
contains the property descriptor interface.
4. (Original) The method of claim 1, wherein the property descriptor interface
defines methods that describe a single property.
5. (Original) The method of claim 1, wherein the object descriptor interface collects
multiple associated property descriptions into a single object description.
6. (Original) The method of claim 1, wherein the object is a database.

7. (Original) The method of claim 6, wherein the step of using methods defined by the object descriptor interface to identify a property of the object comprises using application program interfaces that talk to the database.

8. (Original) The method of claim 1, wherein the object is a Java bean.

9. (Original) The method of claim 8, wherein the step of using methods defined by the object descriptor interface to identify a property of the object comprises using a built-in object introspection mechanism.

10. (Currently amended) A method for providing metadata about a set of properties, comprising:

creating a first object describing metadata for a plurality of data sources, wherein the first object ~~stores~~ maintains a related set of properties; and

creating a set of second objects describing metadata for respective properties of the data sources;

wherein ~~dynamically defined~~ metadata concerning a respective property is obtained by invoking a method in the first object to identify the respective property, and then invoking a method in a respective one of the second objects to dynamically obtain the metadata concerning the respective property.

11. (Original) The method of claim 10, wherein the first object and the set of second objects comprise interface objects.

12. (Original) The method of claim 10, wherein each object in the set of second objects defines methods that describe a single property of a data source.

13. (Original) The method of claim 10, wherein the first object collects multiple associated property descriptions into a single description.

14. (Currently amended) An apparatus for providing metadata, comprising:
~~first creation means for creating an object descriptor class for an object;~~
first implementation means for providing an object descriptor interface ~~using the~~
~~object descriptor class;~~
first creation means for creating an object descriptor class for an object using the
object descriptor interface;
first exposing means for using methods defined by the object descriptor interface
to identify a property of the object;
~~second creation means for creating a property descriptor class for the property of~~
~~the object;~~
second implementation means for providing a property descriptor interface ~~using~~
~~the property descriptor class;~~
second creation means for creating a property descriptor class using the property
descriptor interface; and
second exposing means for using methods defined by the property descriptor
interface to obtain metadata associated with the identified property.
15. (Original) The apparatus of claim 14, wherein the object descriptor interface
extends a property set descriptor interface.
16. (Original) The apparatus of claim 15, wherein the property set descriptor
interface contains the property descriptor interface.
17. (Original) The apparatus of claim 14, wherein the property descriptor interface
defines methods that describe a single property.
18. (Original) The apparatus of claim 14, wherein the object descriptor collects
multiple associated property descriptions into a single object description.
19. (Original) The apparatus of claim 14, wherein the object is a database.

20. (Original) The apparatus of claim 19, wherein the first exposing means comprises means for using application program interfaces that talk to the database.
21. (Original) The apparatus of claim 14, wherein the object is a Java bean.
22. (Original) The apparatus of claim 21, wherein the first exposing means comprises means for using a built-in object introspection mechanism.
23. (Currently amended) An ~~interface~~ apparatus for defining metadata about a related set of properties, comprising:
a first object describing metadata for a plurality of data sources, wherein the first object ~~stores~~ maintains a related set of properties for the plurality of data sources; and
a set of second objects describing metadata for respective properties of the data sources that are maintained by the first object.
24. (Currently amended) The ~~interface~~ apparatus of claim 23, wherein the first object and the set of second objects comprise interface objects.
25. (Currently amended) The ~~interface~~ apparatus of claim 23, wherein each object in the set of second objects defines methods that describe a single property of a data source.
26. (Currently amended) The ~~interface~~ apparatus of claim 23, wherein the first object collects multiple associated property descriptions into a single description.
27. (Currently amended) A computer program product, in a computer readable medium, for defining metadata, comprising:
~~instructions for creating an object descriptor class for an object;~~
instructions for providing an object descriptor interface ~~using the object descriptor~~
~~class;~~
instructions for creating an object descriptor class for an object using the object
descriptor interface;

instructions for using methods defined by the object descriptor interface to identify a property of the object;
~~instructions for creating an property descriptor class for the property of the object;~~
instructions for providing a property descriptor interface ~~using the property descriptor class;~~
instructions for creating a property descriptor class using the property descriptor interface; and
instructions for using methods defined by the property descriptor interface to obtain metadata associated with the identified property.

28. (New) The method of Claim 1, wherein the metadata describes a data type of the property.

29. (New) The method of Claim 1, wherein the metadata describes editing capabilities of the property.